

Introduction to Melioidosis : *Burkholderia pseudomallei*

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06 February 2015

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Introduction

- ❑ **The Disease: Melioidosis**
- ❑ **The Bacteria: *Burkholderia pseudomallei***

Clinical Forms of Melioidosis

- ❑ **Pneumonia or other respiratory infection**
(Most common presentation)
- ❑ **Skin infection**
- ❑ **Pockets of pus throughout body**
- ❑ **Blood infection**
- ❑ **Nervous system infection (less common)**



Risk Factors

- ❑ **One or more factors present in 80% of patients.**
 - ❑ **Diabetes**
 - ❑ **Liver disease**
 - ❑ **Kidney disease**
 - ❑ **Chronic lung disease**
 - ❑ **Problems with immune system**

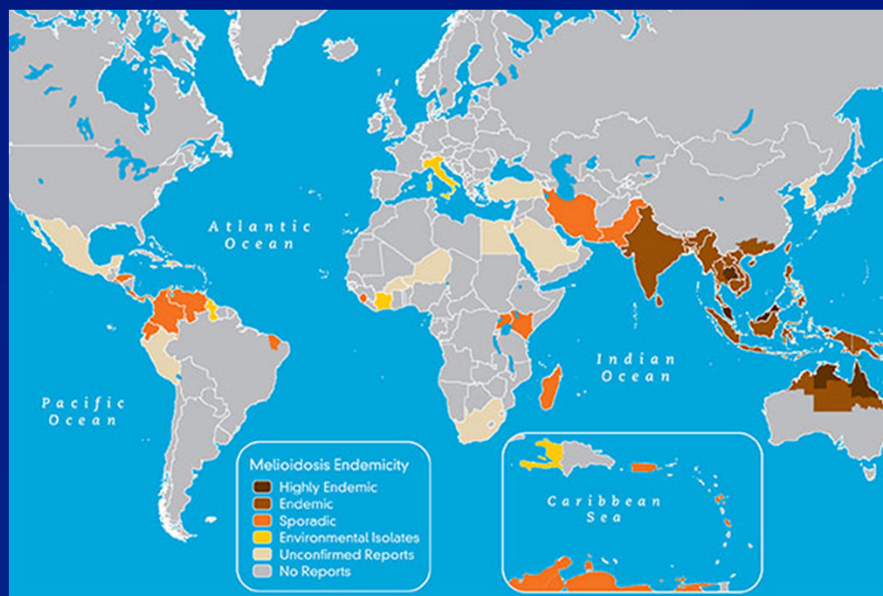
Treatment

- ❑ **Intravenous antibiotics for up to two weeks followed by 3 to 6 months of oral antibiotics in severe cases**
- ❑ **Oral antibiotics alone for milder cases**

Geographic Distribution

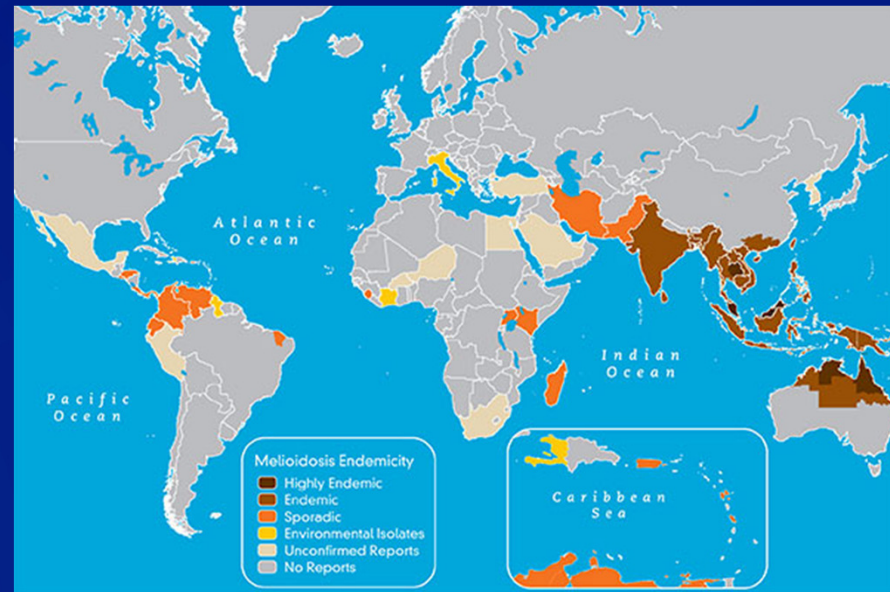
■ Most commonly seen in tropical and subtropical areas

- Endemic in areas such as Southeast Asia, northern Australia, Papua New Guinea, the Indian subcontinent and southern China
- Sporadic cases reported from southwest Asia, Africa, the Caribbean and Central and South America
- About 10 cases per year seen in the United States as well as sporadic cases elsewhere in the Americas



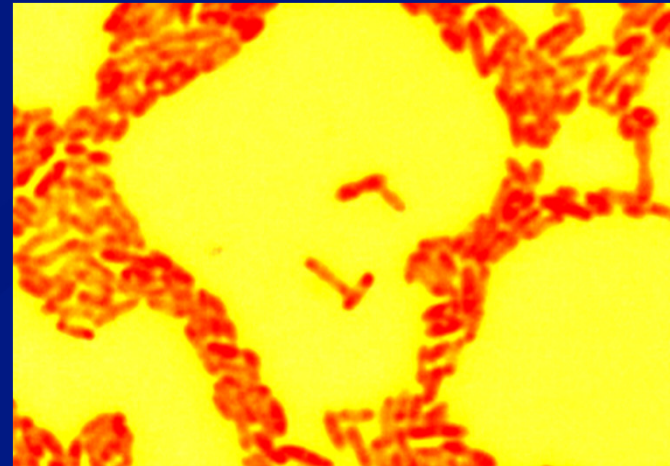
Geographic Distribution

- **Most commonly seen in tropical and subtropical areas**
 - 2000 to 3000 cases per year average in Thailand
 - 50 cases per 100,000 people in northern Australia
 - More sporadic in other regions



Burkholderia pseudomallei

- ❑ Tier 1 Select Agent
- ❑ Found in water and moist soil
- ❑ Opportunistic pathogen
- ❑ Causes human and animal disease
- ❑ Time from exposure to sickness
 - ❑ 1 to 21 days
 - ❑ Average of 9 days in humans
 - ❑ Can be decades



Transmission

❑ Routes of infection

- skin wound contact with soil or water
- Touching or drinking water
- Breathing in water mist or dust

Transmission

- ❑ **Person to Person – Extremely rare**
- ❑ **Animal to Animal**
 - ❑ **Indirect via contaminating area with waste products**
 - ❑ **Little known about spread by direct contact**
- ❑ **Animal to Human**
 - ❑ **Indirect via contaminating area with waste products**

Thank You Questions?



For more information please contact Centers for Disease Control and Prevention

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Telephone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348

E-mail: cdcinfo@cdc.gov Web: <http://www.cdc.gov>

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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